

# Whiteboard Presentation Guide

Physics – 2020/2021

## In a high-quality presentation:

- All group names are written on the whiteboard to 'take ownership' of the data.
- The whiteboard can easily be read by all in the room - **MAKE THINGS BIG!**
- The speaker(s) clearly identifies the purpose and conditions under which the experiment was performed.
- The speakers are clear and project their voices so they can be heard by everyone in the class

## Lab Results:

- All numbers and graphs are labeled with appropriate units and reasonable scaling.
- The derivation of mathematical expressions (type of graphical relationship) is shown, when applicable.
- The speaker(s) concisely summarize the lab group's results.
- There's a labeled diagram of the situation (where appropriate).
- The group members provide intelligent responses to questions posed by the class and the teacher.
- Almost always, our graphs mean something. The meaning of the (1) slope, (2) y-intercept, (3) area of the graph and (4) a mathematical model of the graph should ALL be discussed in each lab. If one of these doesn't have meaning, that should be explicitly stated.

## Others in the class (the audience):

- The audience is expected to listen carefully to a group's presentation.
- Members in the audience are expected to ask questions (respectfully) about the group's results or experimental design.
- Mr. Forrest reserves the right to call on any member of the audience at any time, either about the current presentation or how the current presentation relates back to earlier results.



## General ideas about how groups should interact – to get ALL group members involved:

- Someone to explain how the activity was done and any problems/challenges in the activity.
- Presenter(s) to explain the results on board.
- Someone to answer questions about the board.
- Someone to come up with and ask at least one question about a problem covered by another group.
- While physically writing on a whiteboard may be a 1 person job, there are several other things people should be doing at the same time, including: graphing data on a graphing calculator or composition book to preview it, averaging data from multiple trials, coming up with a brief conclusion and checking with lab partners, coming up with a mathematical model of a relationship for the lab.

# Whiteboarding & Discussing Labs

**Goal:** Agree on a model

<b>Observe</b>	<b>Say</b>
<ul style="list-style-type: none"><li>● Notice on the graphs:<ul style="list-style-type: none"><li>○ shape</li><li>○ slope (“for every”)</li><li>○ intercept</li></ul></li><li>● Comparing graphs:<ul style="list-style-type: none"><li>○ What is similar?</li><li>○ What is different?</li></ul></li><li>● Describe relationships</li><li>● Discuss uncertainty</li></ul>	<ul style="list-style-type: none"><li>● What was your experiment?</li><li>● I notice...</li><li>● I think... because...</li><li>● I agree because...</li><li>● I disagree because...</li></ul>

# Whiteboarding: Discussing Problems

**Goal:** Analyze possible solutions & answers

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- How did you know...?
- Can you point to...?
- Could you draw....?
- How would your answer change if...?
- How does this connect to....?  
(lab, definition, model, etc.)
- If you didn't understand..., what's your next step?